

Form PTO-1449 (modified)

Atty. Docket No.

Serial N .

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09/921,992

Office of Patents and Publications for Applicant's

Applicant

Albert Bor nat et al.

## INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

Filing Date:

August 6, 2001

Group:

1638

U.S. Patent Documents

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Foreign Patent Documents

See Page 1

Other Art

See Page 1

## U.S. Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.

## Foreign Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Country	Class	Sub Class	Translation Yes/No
b	B1	WO 99 58649	11-18-99	PCT			
	B2	WO 00 08169	02-17-00	PCT			
	B3	DE 198 35 219	02-10-00	Germany			No
	B4	WO 00 17233	03-30-00	PCT			No

## Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
b	C11	Hecht et al., "Studies on the nonmevalonate pathway to terpenes: the role of the GcpE (IspG) protein," <i>Proc. Natl. Acad. Sci. USA</i> , National Academy of Science, Washington, US, 98: 14837-14842, 2001.
	C12	Quero et al., "Functional analysis of the Arabidopsis thaliana GCPE protein involved in plastid isoprenoid biosynthesis," <i>FEBS Letters</i> , Elsevier Science Publishers, 514:343-346, 2002.
	C13	Database accession no. AQ690643; XP002221177; 93% Identity to SEQ ID No. 2, Abstract, July 2, 1999.
	C14	Database accession no. AB005246; XP002220622; 81% Ungapped Identity to SEQ ID No.4, abstract & Sato et al., "Structural analysis of arabidopsis thaliana chromosome 5.I. Sequence features of the 1.6 MB regions covered by twenty physically assigned P1 clones, DNA Research, 4:215-230, 1997.

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EXAMINER:

DATE CONSIDERED:

EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

INFORMATION DISCLOSURE STATEMENT — PTO-1449 (MODIFIED)

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE (Rev. 2.32) PATENT AND TRADEMARK OFFICE  INFORMATION DISCLOSURE STATEMENT BY APPLICANT  (Use several sheets if necessary)	ATTY. DOCKET NO.	SERIAL NO.
	REN1-00-084-US	09/921,992
	APPLICANT Boronat et al.	
	FILING DATE	GROUP
	6 August 2001	1638

### U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	A01						
	A02						
	A03						
	A04						
	A05						
	A06						
	A07						
	A08						
	A09						

### FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
	B01	<del>WO-00/17233</del>	<del>30-Mar-00</del>	<del>PCT</del>			<del>YES=CA2343919</del>
	B02	<del>WO-00/08169</del>	<del>17-Feb-00</del>	<del>PCT</del>			<del>YES=CA2339519*</del>
	B03	<del>DE-198-35-219 A</del>	<del>10-Feb-00</del>	<del>Germany</del>			<del>family member CA*</del>
	B04	<del>PCT-99/58649</del>	<del>18-Nov-99</del>	<del>PCT</del>			
	B05						

### OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

<i>b</i>	C01	Sato et al., Database EMBL, Accession No.: AB005246 (18 Jul 97)
<i>b</i>	C02	Wing et al, Database EMBL, Accession No. AQ690643 (XP-002221177) (2 Jul 99)
<i>b</i>	C03	Baker et al., "Sequence and characterization of the gcpE gene of Escherichia coli", Fems Microbiology Letters. 94: 175-180 (1992)
<i>b</i>	C04	Hecht et al., "Studies of the nonmevalonate pathway to terpenes: The role of the GcpE (IspG) protein," PNAS vol 98, no.26 14837-14842, December 18, 2001.
<i>b</i>	C05	Querol et al., "Functional Analysis of the Arabidopsis thaliana GCPE protein involved in plastid isoprenoid biosynthesis," FEBS Letters 514 (2002) 343-346.

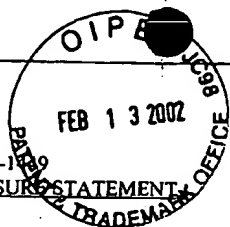
\* References were previously cited by the Applicant or by the Examiner and thus copies of these references are not being resubmitted with this statement. Copies of the prior PTO-1449 and -892 forms are enclosed herein. See 37 C.F.R. §1.98(d).

Examiner <i>Stu Baum</i>	Date Considered <i>11/6/04</i>
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**EXAMINER:** Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

(Form PTO-1449 [6-4])

FORM PTO-1539  
INFORMATION DISCLOSURE STATEMENT



ATTY. DOCKET NO.

16516.107

APPLICATION NO.

09/921,992

APPLICANTS

Albert BORONAT *et al.*

FILING DATE

August 6, 2001

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1645

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
	AA1						
	AB1						
	AC1						
	AD1						
	AE1						

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
	AF1						Yes No
	AG1						Yes No
	AH1						Yes No
	AI1						Yes No
	AJ1						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

<del>AK</del>	<del>1</del>	<del>Baker <i>et al.</i>, "Sequence and characterization of the <i>gcpE</i> gene of <i>Escherichia coli</i>", <i>FEMS Microbiol. Lett.</i> 94:175-180 (1992)</del>
<i>b</i>	AL	1
<i>b</i>	AM	1
<i>b</i>	AN	1
<i>b</i>	AO	1

*Duplicate of 95103*

Bevan, "Binary Agrobacterium vectors for plant transformation", *Nucleic Acids Research* 12:8711-8720 (1984)

Duvold *et al.*, "Incorporation of 2-C-Methyl-D-erythritol, a Putative Isoprenoid Precursor in the Mevalonate-Independent Pathway, into Ubiquinone and Menaquinone of *Escherichia coli*", *Tetrahedron Letters* 38:6181-6184 (1997)

Eisenreich *et al.*, "The deoxyxylulose phosphate pathway of terpenoid biosynthesis in plants and microorganisms" *Chem. Bio.* 5:R221-233 (1998)

Elliott, "A Method for Constructing Single-Copy lac Fusions in *Salmonella typhimurium* and Its Application to the *hemA-prfA* Operon" *J. Bacteriol.* 174:245-253 (1992)

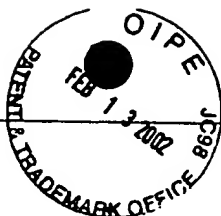
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*Steve Baum*

DATE CONSIDERED

*9/5/04*

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FORM PTO-1449  
INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.

APPLICATION NO.

APPLICANTS

FILING DATE

GROUP

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
	AA2					
	AB2					
	AC2					
	AD2					
	AE2					

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
	AF2					Yes No
	AG2					Yes No
	AH2					Yes No
	AI2					Yes No
	AJ2					Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AK	2	Herz <i>et al.</i> , "Biosynthesis of terpenoids: YgbB protein converts 4-diphosphocytidyl-2C-methyl-D-erythritol 2-phosphate to 2C-methyl-D-erythritol 2, 4-cyclodiphosphate," <i>PNAS</i> 97(6):2485-2490(2000)
	AL	2	Rather <i>et al.</i> , "aarC, an Essential Gene Involved in Density-Dependent Regulation of the 2'-N-Acetyltransferase in <i>Providencia stuartii</i> ," <i>J. Bacteriol.</i> 179:2267-2273 (1997)
	AM	2	Rohmer <i>et al.</i> , "Isoprenoid biosynthesis in bacteria: a novel pathway for the early steps leading to isopentenyl diphosphate," <i>Biochem. J.</i> 295:517-524 (1993)
	AN	2	Rohmer, "Isoprenoid biosynthesis via the mevalonate-independent route, a novel target for antibacterial drugs?" <i>Prog. Drug. Res.</i> 50:135-154 (1998)
	AO	2	Rohmer, "The mevalonate-independent methylerythritol 4-phosphate (MEP) pathway for isoprenoid biosynthesis, including carotenoids," <i>Pure Appl. Chem.</i> 71 No. 12:2279-2284 (1999)
	AP	2	Simons <i>et al.</i> , "Improved single and multicopy lac-based cloning vectors for protein and operon fusions," <i>Gene</i> 53:85-96 (1987)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.